

Belts in Back – How to Raise Rear Seat Belt Use

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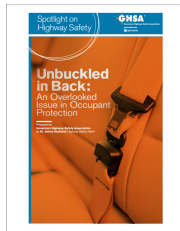
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Unbuckled in Back: An Overlooked Issue in Occupant Protection

Sponsored by the Governors Highway Safety Association

Project oversight by
Jonathan Adkins, Executive Director, and
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Available at
www.ghsa.org/html/publications/index.html



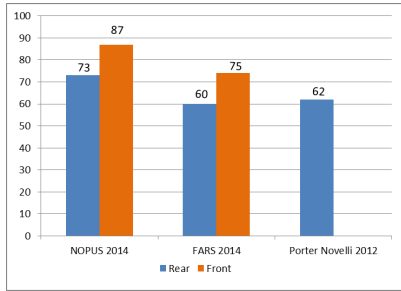
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Overview

- Adult belt use lower in rear seats than in front
 - Data
 - Consequences
- Reasons
 - Laws and enforcement
 - Programs and messaging
 - Beliefs
- Special case: taxis and limos
- Solutions
[if I tell you the solutions, you won't listen to the next 10 minutes]

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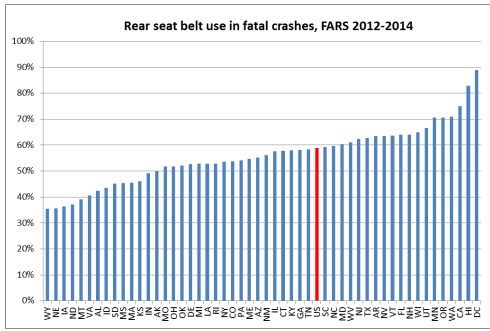
Adult rear seat belt use rates



Passenger vehicle occupants age 8 and older
Porter Novelli survey "always use"

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Adult rear seat belt use rates



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Consequences of lower belt use

- 838 unbelted rear seat adult fatalities in 2014 (FARS)
- Rear seat belt effectiveness: 44% cars, 78% LTVs (NHTSA)
- If all 838 had been belted:
about 414 would have survived
- If use rate had been 75% (the FARS front seat rate):
about 155 would have survived
- Increased risk to front seat occupants: "In a crash at 30 mph an unbelted adult rear-seat passenger belt is thrown forward with the force of a 3 1/2-ton elephant charging straight through the front."

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Reason: Laws

Adult Law	Front Seat	Rear Seat
Primary	35	19
Secondary	15	10
No law	1	22

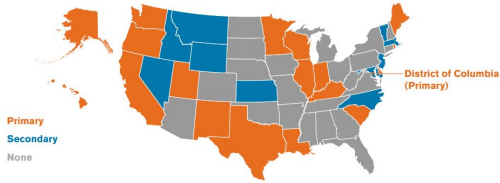
Primary: any unbelted occupant may be ticketed at any time
 Secondary: unbelted occupants may be ticketed only if police stop the vehicle for another reason

Last state to enact or upgrade a rear seat law: MD secondary law 2013

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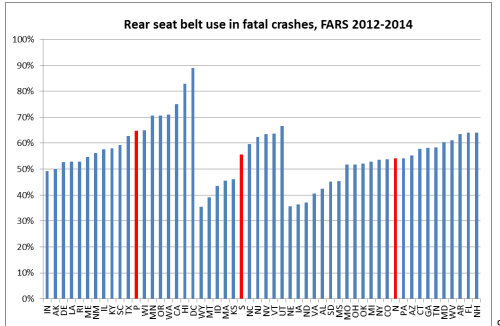
Laws

Figure 1. Rear seat belt use laws for adults, November 2015.



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Belt use by law type: primary, secondary, none



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Reason: Messaging and programs

- Most law states have “belt use required in all seats” messages
- But ...
- No state or national campaigns explicitly target rear seat belt use by adults

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Reason: Beliefs – “I’m safe in the back seat”

- True for older vehicles, but little difference in newer ones
- Perhaps due to “kids safer in back” campaigns
- The real message point: rear seat adults are 3 times more likely to die in a crash if they are unbelted (FARS)

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Reason: Beliefs – “I’m safe in the back seat”

Injury	Belted	Unbelted
O - None	36.3 %	6.0 %
C - Possible	14.4 %	7.7 %
B – Minor	21.8 %	19.4 %
A - Serious	14.1 %	27.1 %
K - Fatal	13.3 %	39.8 %
	100 %	100 %

Rear seat passenger vehicle occupants age 8 and older in fatal crashes, 2014

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Taxis and limousines

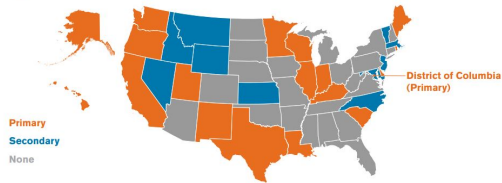
- Some states exempt taxis and limos from rear belt laws
- Self-reported belt use in New York City taxis, 2012-13: 38%
- John Nash and Bob Simon fatalities— unbelted in rear seat
- Some NYC emergency rooms now have a term for the frequent injuries they see when unbelted rear seat passengers strike a taxi's partition:

“partition face” (NY Times)

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Solution #1: Laws

Figure 1. Rear seat belt use laws for adults, November 2015.



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Solution #2: Enforcement

- Enforce rear seat belt laws with the same vigor as front seat laws

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Solution #3: Education

- Include rear seat positions in belt use education
- Consider campaigns directed to rear seat occupants



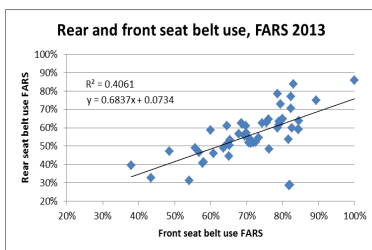
Solution #4: Taxis and limos

- Include taxis and limos in belt use laws, enforcement, and education

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Solution #5: Front seat belt use

Higher front seat use produces higher rear seat use



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Conclusion

Increasing rear seat belt use is a quick, easy, and cheap way to save lives and reduce injuries

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Questions and comments

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